Amendments to the Claims:

(Currently amended) A system for periodically moving information units from a
plurality of sources to an output destination based on information stored about
each of the plurality of sources, the system comprising:

a time-based calendar which handles some of the information units based on the information stored about the plurality of sources;

a time-independent calendar which handles other of the information units based on information stored about the plurality of sources and which places each <u>source</u> flow into a <u>queue</u> <u>calendar location</u> and which moves the <u>source</u> flow to a different place in the <u>queue</u> <u>calendar</u> after servicing the <u>source</u> flow; and

a mechanism for determining when a flow is added to the time-based queue source whether that source was at a location flow has had a place in the time-based queue calendar and preventing the source flow from achieving a better place being placed at a location ahead of a calculated location in the time-based calendar queue as a result of disconnecting and reconnecting.

2. (Currently amended) A method of placing servicing data flows placed into a queue for service in turn comprising:

determining whether a data flow queue had a previous position in a calendar the queue;

if the data flow queue had a previous position in the calendar queue, determining whether the a new position which would be assigned to it is better earlier than the previous a previously calculated new position in the calendar queue;



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if the new position which would be assigned is better earlier than the previous previously calculated new position, using the previous previously calculated new position;

and, if the previous previously calculated new position is not better earlier than the position which would be assigned, using the position which would be assigned.

- (Currently amended) A method including the steps of Claim 2 and further including considering the aging of the queue to determine whether the stored parameters remain valid.
- 4. (Canceled)
- 5. (New) The system of claim 1 wherein the plurality of sources include a plurality of queues.
- 6. (New) The system of claim 1 or claim 5 wherein the calculated location includes the location whereat the queue would have been attached upstream from the location whereat said queue was last serviced.
- 7. (New) The method of claim 2 wherein using includes attaching the queue to the selected location.
- 8. (New) The method of claim 6 wherein the stored parameter includes time stamps.

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9. (New) A system comprising:

a time-based calendar which handles some of a plurality of information units based on the information stored about a plurality of sources; and

a mechanism for determining when a flow is added to a source whether that source was at a location in the time-based calendar and preventing the source from being placed at a location ahead of a predefined location in the time-based calendar.

10. (New) A method comprising:

providing at least one time based calendar having a plurality of locations and a time pointer moving relative to the plurality of locations as a result of scheduler ticks;

attaching a queue to a first calendar location whereat the time pointer is pointing; servicing said queue by causing a frame to be transmitted from said queue whereupon said queue goes empty;

identifying a second location whereat the queue would have been re-attached had it not gone empty;

examining pre-defined characteristics associated with said queue to determine occupancy frames within said queue;

if examination indicates the queue is not empty, identifying a current location whereat the time pointer points;

correlating the current location of the time pointer and the second location; and selecting a location which is not earlier than the second location.

- 11. (New) The method of claim 10 wherein the not emptied queue is attached to the selected location.
- 12. (New) The method of claims 10 or 11 wherein the queue is attached by writing the i.d. (Identification number) of said queue in a stack located at each location.



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13. (New) The method of claim 12 wherein the stack is a Last In First Out (LIFO) stack.